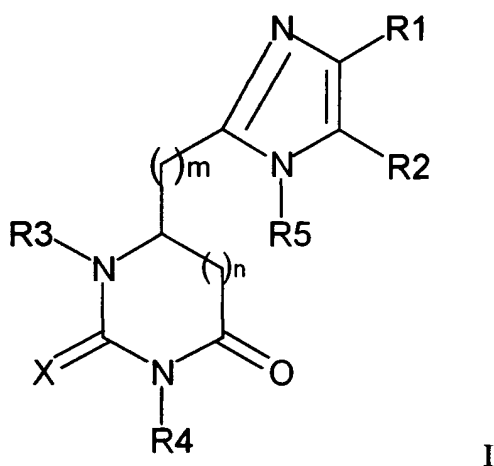


**In the claims:**

**Claims 1 to 14 (cancelled).**

**Claim 15 (currently amended)**      A compound of the formula



in racemic or enantiomeric form,

R1 is selected from the group consisting of (C<sub>1</sub>-C<sub>12</sub>) alkyl, (C<sub>0</sub>-C<sub>6</sub>)alkyl-C(O)-O-Z1,

(C<sub>0</sub>-C<sub>6</sub>) alkyl-C(O)-NH-(CH<sub>2</sub>)<sub>p</sub>-Z<sub>2</sub> and unsubstituted or substituted aryl,

Z1 is selected from the group consisting of H, (C<sub>1</sub>-C<sub>6</sub>) alkyl and -(CH<sub>2</sub>)<sub>p</sub>-aryl;

Z2 is selected from the group consisting of amino, (C<sub>1</sub>-C<sub>12</sub>)alkylamino,

(C<sub>3</sub>-C<sub>8</sub>) cycloalkylamino, N,N-di-(C<sub>1</sub>-C<sub>12</sub>) alkylamino,

NH-C-(O)-O-(CH<sub>2</sub>)<sub>p</sub>-phenyl, NH-C(O)-O-(CH<sub>2</sub>)<sub>p</sub>-(C<sub>1</sub>-C<sub>6</sub>) alkyl, phenyl, naphthyl,  
pyridinyl, furanyl, pyrrolyl, thiophenyl, thiazolyl, indanyl, indolyl, imidazolyl,  
benzofuranyl, benzothiophenyl and phthalimidyl and carbocyclic aralkyl selected from

the group consisting of benzyl, benzothiophenyl, phenylpropyl and phenylbutyl and heterocyclic aralkyl selected from the group consisting of indolylalkyl and phthalimidoalkyl,

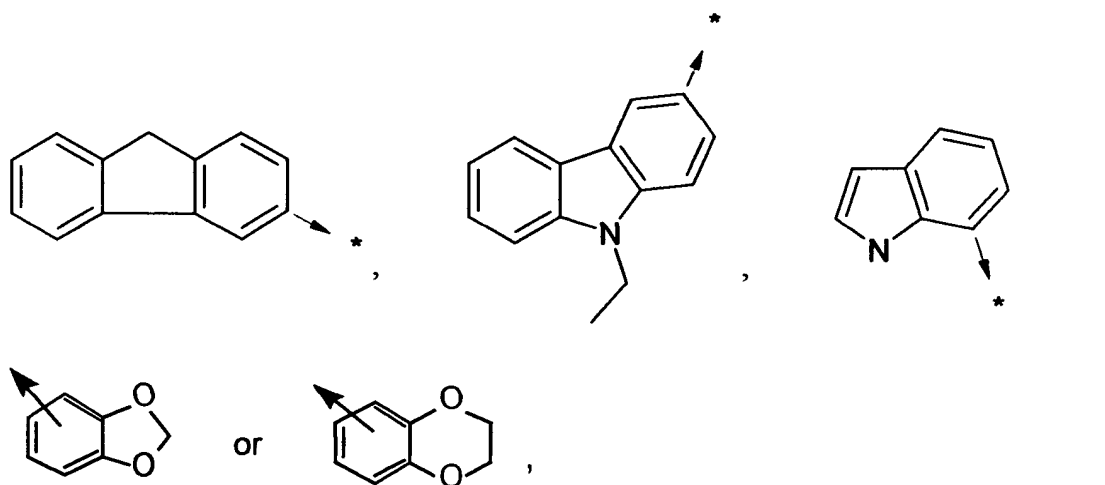
and unsubstituted or substituted heterocyclic non-aromatic;

R2 is selected from the group consisting of H, (C<sub>1</sub>-C<sub>12</sub>) alkyl and aryl optionally substituted;

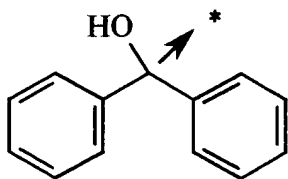
R3 is H or (CH<sub>2</sub>)<sub>p</sub>-Z3;

Z3 is selected from the group consisting of (C<sub>1</sub>-C<sub>12</sub>) alkyl, (C<sub>1</sub>-C<sub>12</sub>) alkenyl, (C<sub>3</sub>-C<sub>8</sub>) cycloalkyl, Y1-(CH<sub>2</sub>)<sub>p</sub>-phenyl-(X1)<sub>n</sub>, -S-(C<sub>1</sub>-C<sub>12</sub>) alkyl, S-(C<sub>1</sub>-C<sub>12</sub>) alkyl-S-S-(C<sub>1</sub>-C<sub>12</sub>) alkyl, and unsubstituted or substituted carbocyclic or heterocyclic aryl;

where n is 0 or 1,



*bis*-arylalkyl or



Y1 is O, S, NH or is absent;

R4 is  $(\text{CH}_2)_p\text{-Z4}$ ;

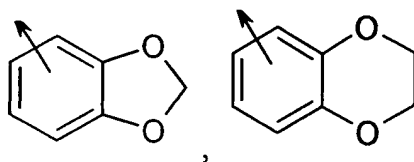
Z4 is selected from the group consisting of amino,  $(\text{C}_1\text{-C}_{12})$  alkyl,

$(\text{C}_3\text{-C}_8)$  cycloalkyl,  $(\text{C}_1\text{-C}_{12})$  alkylamino, N,N-di- $(\text{C}_1\text{-C}_{12})$  alkylamino,

amino  $(\text{C}_3\text{-C}_6)$  cycloalkyl, amino  $(\text{C}_1\text{-C}_6)$  alkyl  $(\text{C}_3\text{-C}_8)$  cycloalkyl  $(\text{C}_1\text{-C}_6)$  alkyl,

carbocyclic or heterocyclic aminoaryl,  $(\text{C}_1\text{-C}_{12})$  alkoxy,  $(\text{C}_1\text{-C}_{12})$  alkenyl, N-C(O)O $(\text{C}_1\text{-C}_6)$  alkyl, unsubstituted or substituted carbocyclic or heterocyclic aryl, unsubstituted or

substituted heterocyclic non-aromatic radical, *bis*-arylalkyl, di-arylalkyl,

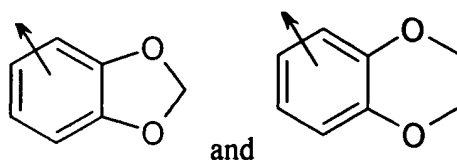


and N (R6)(R7), R6 and R7 taken together with the nitrogen atom which they carry form together a heterocycle of 5 to 7 ring members;

R5 is selected from the group consisting of H,  $-(\text{CH}_2)_p\text{-C(O)-}(\text{CH}_2)_p\text{-Z5}$ ,  $-(\text{CH}_2)_p\text{-Z5}$ , -

$(\text{CH}_2)_p\text{-OZ5}$  or  $-(\text{C}_6\text{-C}_6)$  alkyl-C(O)-NH- $(\text{CH}_2)_p\text{-Z5}$ ,

Z5 is unsubstituted or substituted member selected from the group consisting of  $-(C_1-C_{12})$  alkyl, benzo[b]thiophene, phenyl, naphthyl, benzo[b]furanyl, thiophene, isoxazolyl, indolyl,



it being understood that the above substituents are selected from the group consisting of C1, F, Br, I, CF<sub>3</sub>, NO<sub>2</sub>, OH, NH<sub>2</sub>, CN, N<sub>3</sub>, -OCF<sub>3</sub>, (C<sub>1</sub>-C<sub>12</sub>) alkyl, (C<sub>1</sub>-C<sub>12</sub>) alkoxy,  $-(CH_2)_p$ -phenyl-(X1)<sub>q</sub>, -NH-CO-(C<sub>1</sub>-C<sub>6</sub>) alkyl, -NH-C(O)O-(C<sub>1</sub>-C<sub>6</sub>) alkyl, -S-(C<sub>1</sub>-C<sub>6</sub>) alkyl, -S-phenyl-(X1)<sub>q</sub>, -O-(CH<sub>2</sub>)<sub>p</sub>-phenyl-(X1)<sub>q</sub>,  $-(CH_2)_p$ -C(O)-O-(C<sub>1</sub>-C<sub>6</sub>) alkyl,  $-(CH_2)_p$ -C(O)-(C<sub>1</sub>-C<sub>6</sub>) alkyl, -O-(CH<sub>2</sub>)<sub>p</sub>-NH<sub>2</sub>, -O-(CH<sub>2</sub>)<sub>p</sub>-NH-(C<sub>1</sub>-C<sub>6</sub>) alkyl, -O-(CH<sub>2</sub>)<sub>p</sub>-N-di((C<sub>1</sub>-C<sub>6</sub>) alkyl) and ((C<sub>0</sub>-C<sub>12</sub>) alkyl-(X1)<sub>q</sub>;

X1, each time that it occurs, is independently selected from the group consisting of H, Cl, F, Br, I, CF<sub>3</sub>, NO<sub>2</sub>, OH, NH<sub>2</sub>, CN, N<sub>3</sub>, -OCF<sub>3</sub>, (C<sub>1</sub>-C<sub>12</sub>) alkyl, (C<sub>1</sub>-C<sub>12</sub>) alkoxy, -S-(C<sub>1</sub>-C<sub>6</sub>) alkyl,  $-(CH_2)_p$ -amino,  $-(CH_2)_p$ -NH-(C<sub>1</sub>-C<sub>6</sub>) alkyl,  $-(CH_2)_p$ -N-di-((C<sub>1</sub>-C<sub>6</sub>) alkyl),  $-(CH_2)_p$ -phenyl and  $-(CH_2)_p$ -NH-(C<sub>3</sub>-C<sub>6</sub>)-cycloalkyl;

p each time that it occurs is independently an integer from 0 to 6;

q each time that it occurs is independently an integer from 1 to 5;

X is O or S;

n is 0; and

m is 1, 2 or 3;

or a pharmaceutically acceptable salt of said compound.

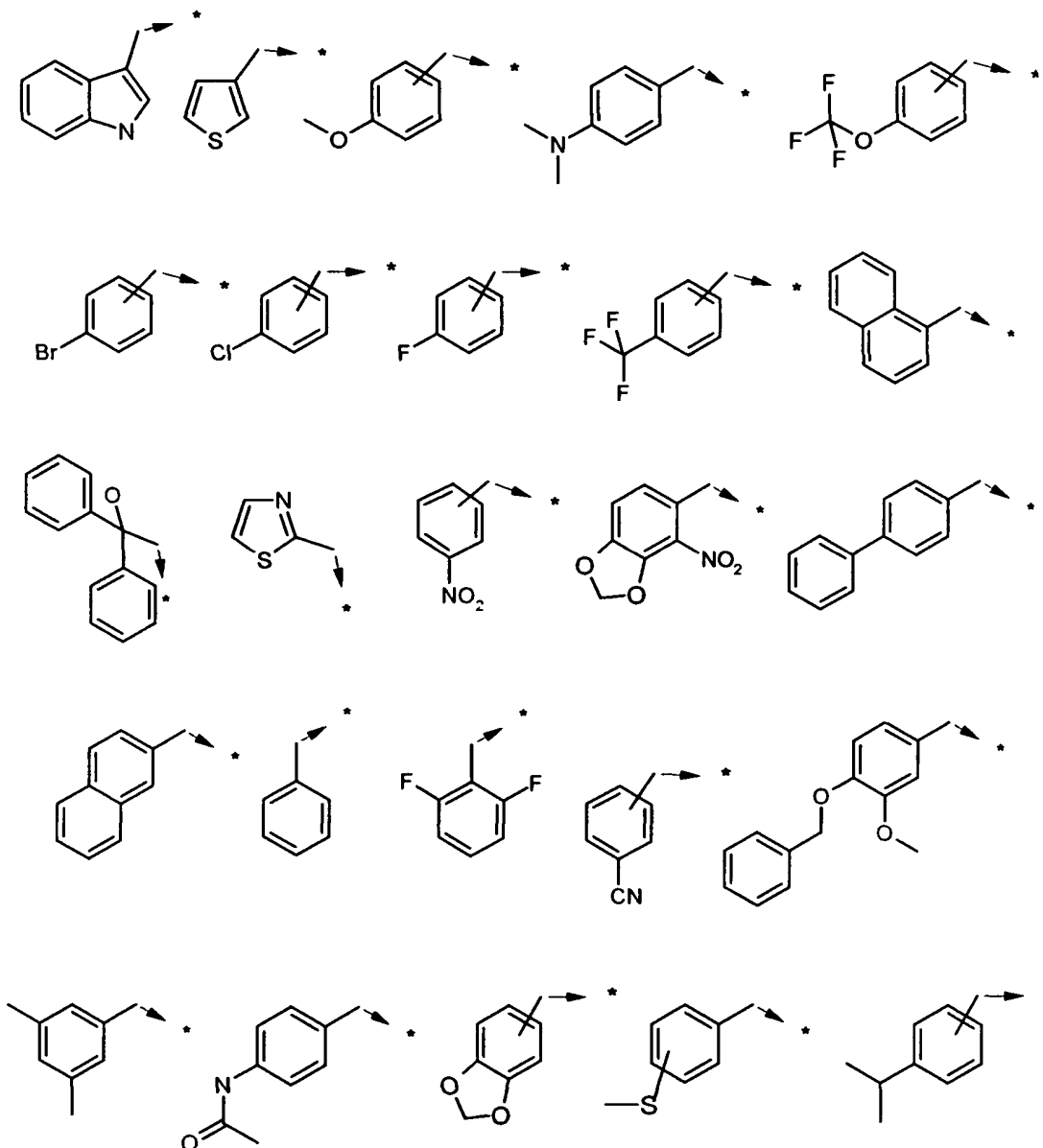
**Claim 16 (previously presented)**

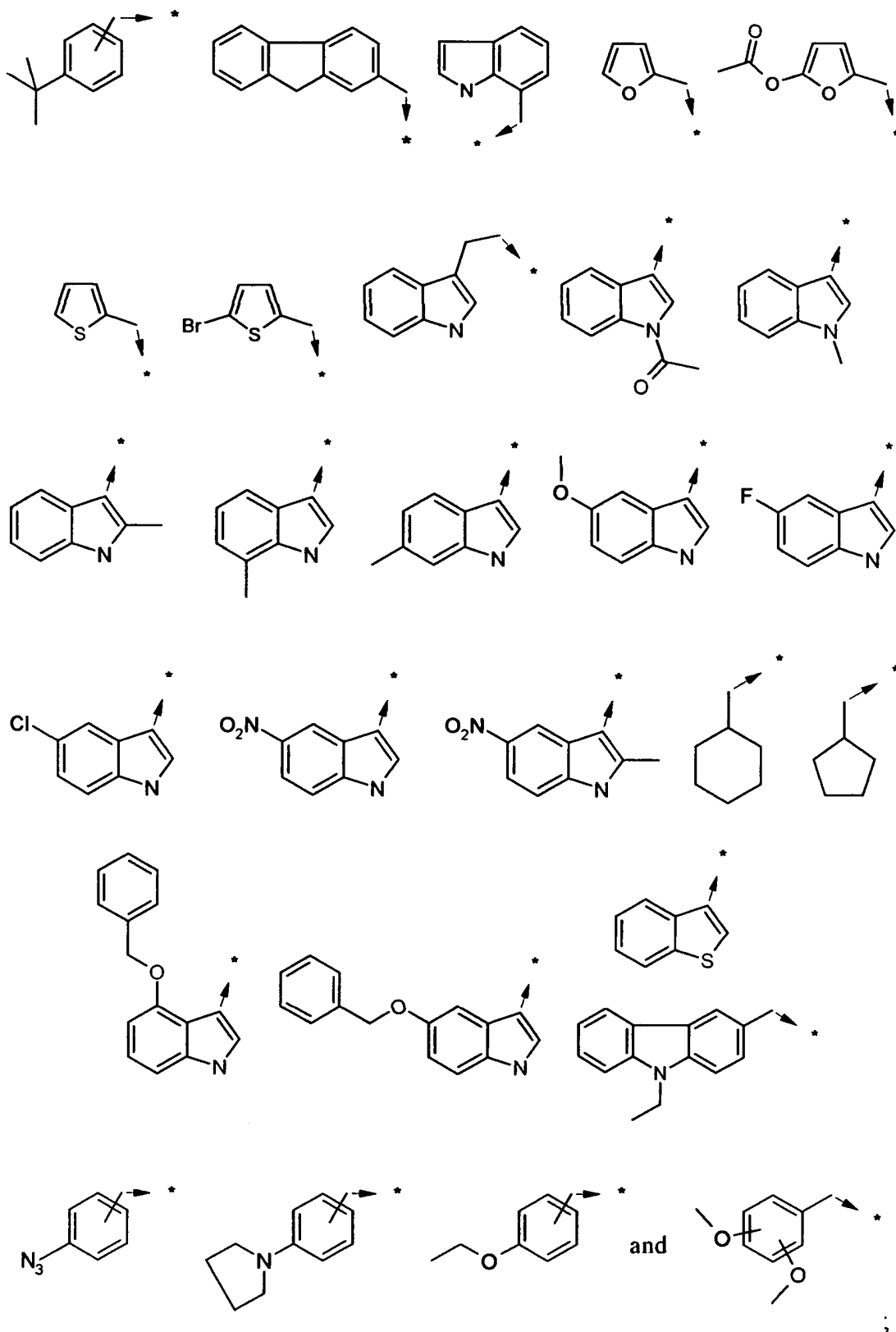
A compound of Claim 15, wherein

R1 is unsubstituted or substituted aryl;

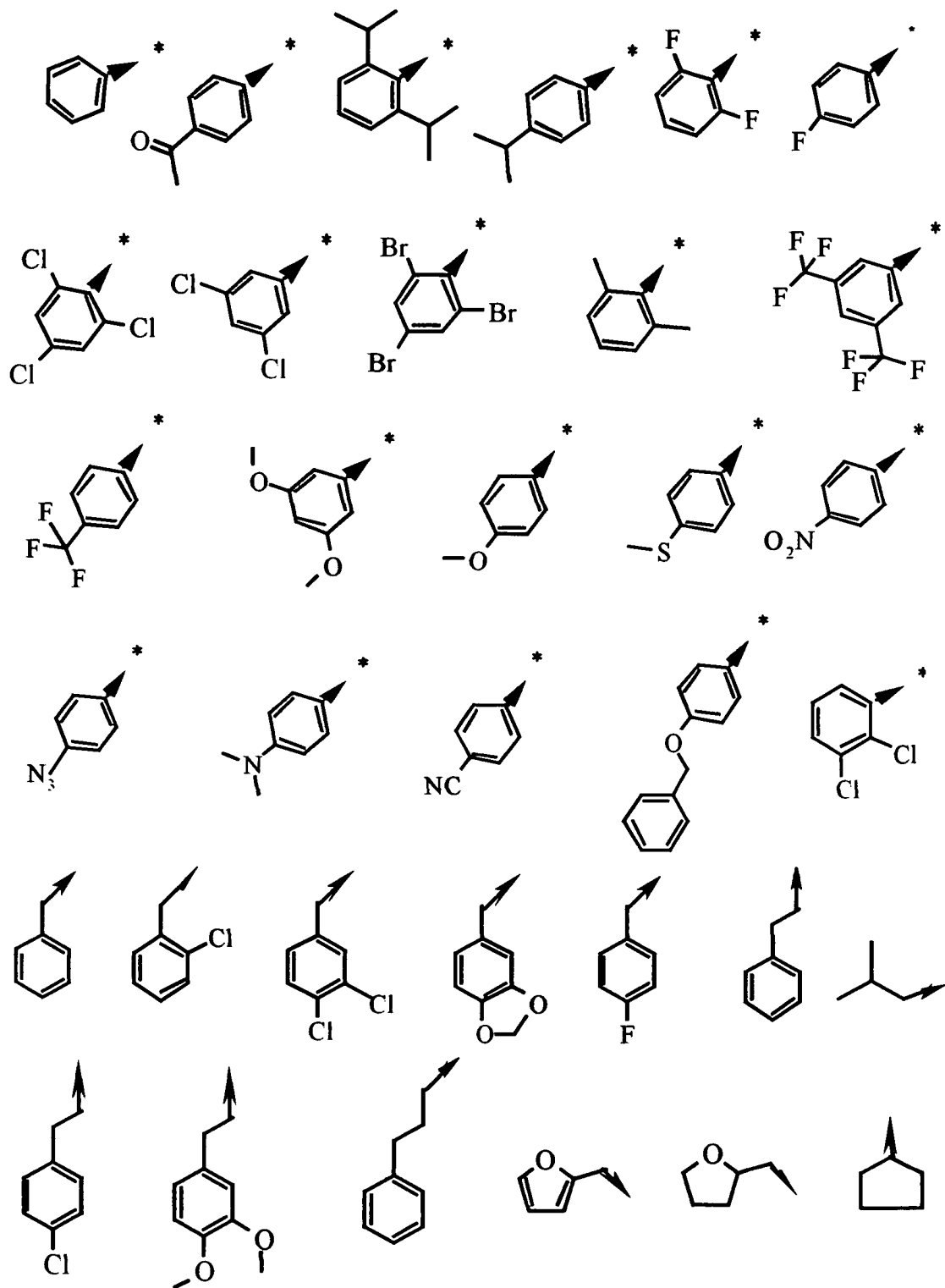
R2 is H or alkyl;

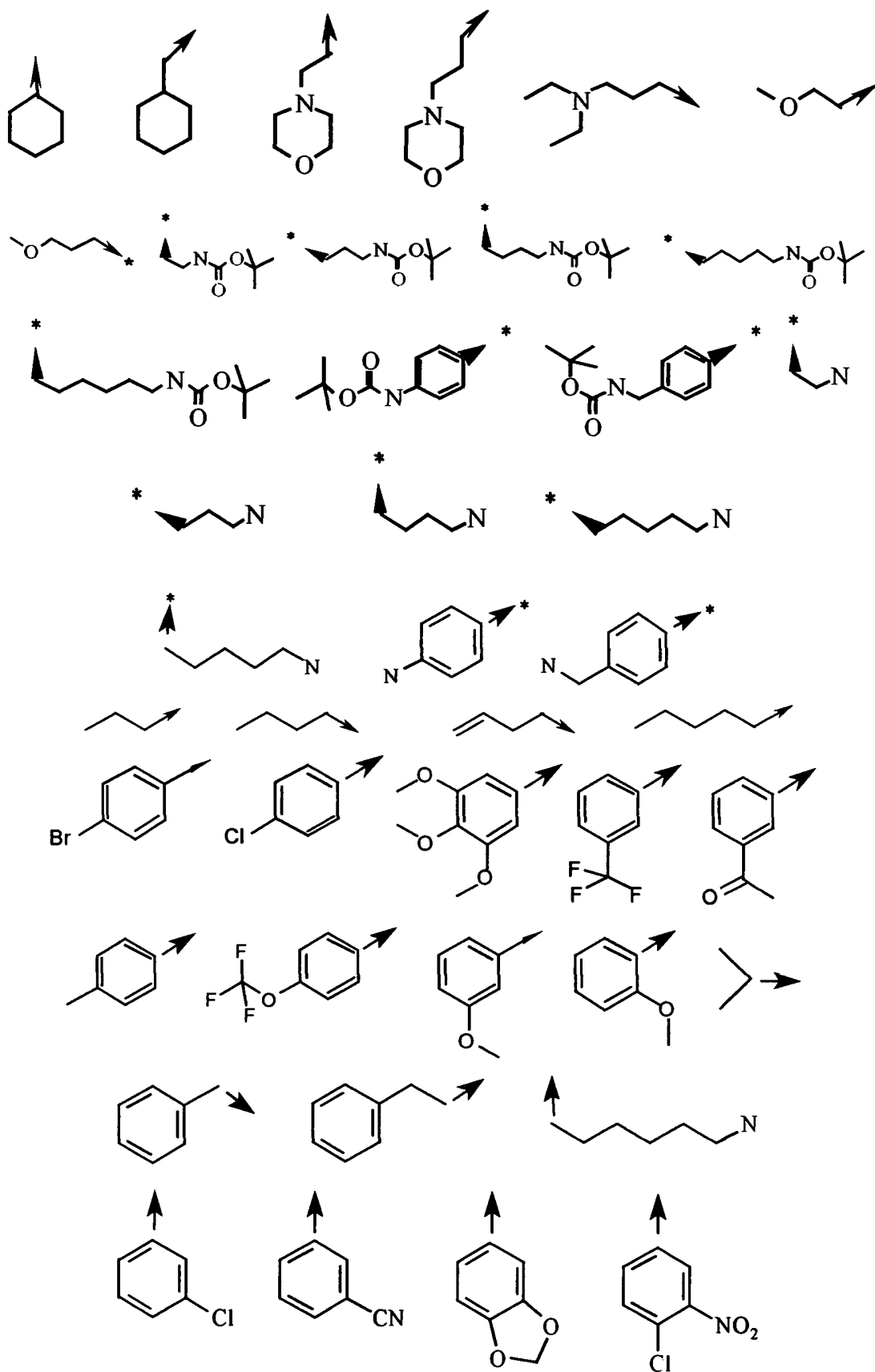
R3 is selected from the group consisting of



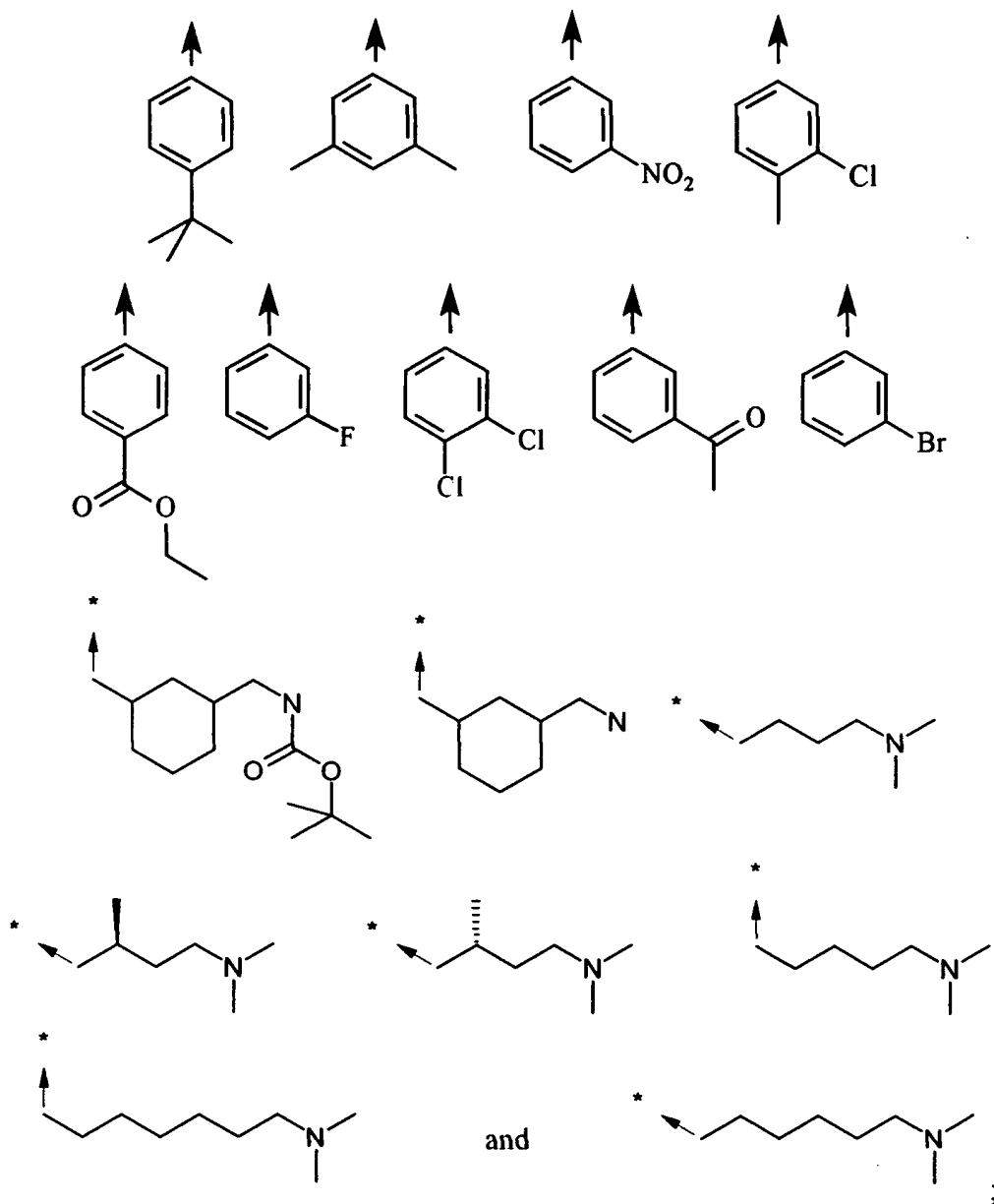


R4 is selected from the group consisting of









R5 is H or alkyl;

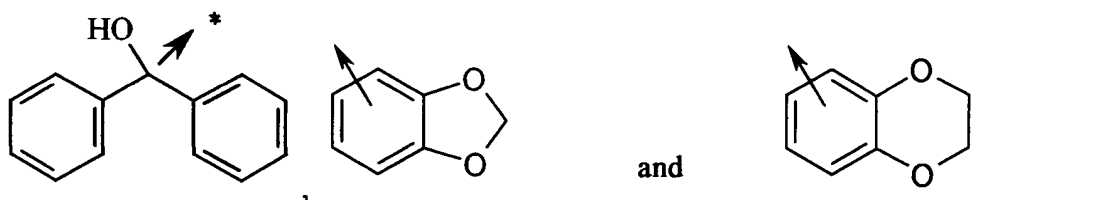
or a pharmaceutically acceptable salt of said compound.

**Claim 17 (currently amended)** A compound of Claim 15, wherein R1 is unsubstituted phenyl or phenyl substituted with a member of the group consisting of halogen, (C<sub>1</sub>-C<sub>12</sub>) alkyl, (C<sub>1</sub>-C<sub>12</sub>) alkoxy and nitro;

R2 and R5 are H or alkyl;

R3 is H or  $(\text{CH}_2)_p\text{-Z3}$ ;

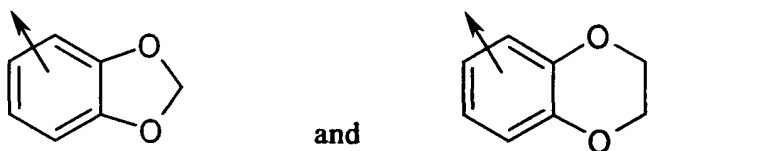
Z3 is selected from the group consisting of  $(\text{C}_1\text{-C}_{12})$  alkyl,  $(\text{C}_3\text{-C}_8)$  cycloalkyl,  $\text{Y1-(CH}_2)_p\text{-phenyl-(X1)}_n$ , unsubstituted or substituted carbocyclic or heterocyclic aryl, unsubstituted or substituted non-aromatic heterocyclic, *bis*-arylalkyl, di-arylalkyl,



Y1 is  $\theta$ , O, S, NH or is absent;

R4 is  $(\text{CH}_2)_p\text{-Z4}$ ;

Z4 is selected from the group consisting of amino,  $(\text{C}_1\text{-C}_{12})$  alkyl,  $(\text{C}_3\text{-C}_8)$  cycloalkyl,  $(\text{C}_1\text{-C}_{12})$  alkylamino, N,N-di- $(\text{C}_1\text{-C}_{12})$  alkylamino, amino  $(\text{C}_3\text{-C}_6)$  cycloalkyl, amino  $(\text{C}_1\text{-C}_6)$  alkyl  $(\text{C}_3\text{-C}_8)$  cycloalkyl  $(\text{C}_1\text{-C}_6)$  alkyl, carbocyclic or heterocyclic aminoaryl, an unsubstituted or substituted carbocyclic and heterocyclic aryl, unsubstituted or substituted non-aromatic heterocyclic, *bis*-arylalkyl, di-arylalkyl,



it being understood that the substituents or substituted phenyl is at least one member of the group consisting of Cl, F, Br, I,  $\text{CF}_3$ ,  $\text{NO}_2$ , OH,  $\text{NH}_2$ , CN,  $\text{N}_3$ ,  $-\text{OCF}_3$ ,  $(\text{C}_1\text{-C}_{12})$  alkoxy,  $-(\text{CH}_2)_p\text{-phenyl-(X1)}_q$ ,  $-\text{NH-CO-(C}_1\text{-C}_6\text{) alkyl}$ ,  $-\text{NH-C(O)O-(C}_1\text{-C}_6\text{) alkyl}$ ,  $-\text{S-(C}_1\text{-C}_6\text{)}$

alkyl, -S-phenyl-(X1)<sub>q</sub>, -O-(CH<sub>2</sub>)<sub>p</sub>-phenyl-(X1)<sub>q</sub>, -(CH<sub>2</sub>)<sub>p</sub>-C(O)-O-(C<sub>1</sub>-C<sub>6</sub>) alkyl, -(CH<sub>2</sub>)<sub>p</sub>-C(O)-(C<sub>1</sub>-C<sub>6</sub>) alkyl, -O-(CH<sub>2</sub>)<sub>p</sub>-NH<sub>2</sub>, -O- (CH<sub>2</sub>)<sub>p</sub>-NH-(C<sub>1</sub>-C<sub>6</sub>) alkyl, -O-(CH<sub>2</sub>)<sub>p</sub>-N-di-((C<sub>1</sub>-C<sub>6</sub>) alkyl and -(C<sub>6</sub>-C<sub>12</sub>) alkyl-(X1)<sub>q</sub>;

X1, each time that it occurs, is selected from the group consisting of H, Cl, F, Br, I, CF<sub>3</sub>, NO<sub>2</sub>, OH, NH<sub>2</sub>, CN, N<sub>3</sub>, -OCF<sub>3</sub>, (C<sub>1</sub>-C<sub>12</sub>) alkyl, (C<sub>1</sub>-C<sub>12</sub>) alkoxy, -S-(C<sub>1</sub>-C<sub>6</sub>) alkyl,

-(CH<sub>2</sub>)<sub>p</sub>amino, -(CH<sub>2</sub>)<sub>p</sub>-NH-(C<sub>1</sub>-C<sub>6</sub>) alkyl, -(CH<sub>2</sub>)<sub>p</sub>-N-di-((C<sub>1</sub>-C<sub>6</sub>) alkyl), -(CH<sub>2</sub>)<sub>p</sub>-phenyl and -(CH<sub>2</sub>)<sub>p</sub>-NH-(C<sub>3</sub>-C<sub>6</sub>) cycloalkyl;

p each time that it occurs is independently an integer from 0 to 6; and

+ q each time that it occurs is independently an integer from 1 to 5.

**Claim 18 (currently amended)**

A compound of Claim 17, wherein

R1 is phenyl or phenyl substituted by a member selected from the group consisting of halogen, (C<sub>1</sub>-C<sub>12</sub>) alkyl, (C<sub>1</sub>-C<sub>12</sub>) alkoxy and nitro;

R2 and R5 are H or alkyl;

R3 is (CH<sub>2</sub>)<sub>p</sub>-Z3,

Z3 is selected from the group consisting of (C<sub>3</sub>-C<sub>8</sub>) cycloalkyl, unsubstituted or substituted phenyl, naphthyl, furanyl, thiophene, indolyl, pyrrolyl and benzothiophene;

R4 is (CH<sub>2</sub>)<sub>p</sub>-Z4;

Z4 is selected from the group consisting of amino, (C<sub>1</sub>-C<sub>12</sub>) alkylamino, N,N-di-(C<sub>1</sub>-C<sub>12</sub>) alkylamino and amino (C<sub>1</sub>-C<sub>6</sub>) alkyl (C<sub>3</sub>-C<sub>6</sub>) cycloalkyl-(C<sub>1</sub>-C<sub>6</sub>) alkyl;

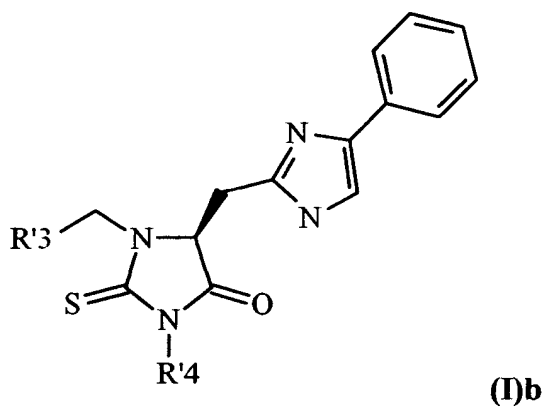
X is S;

p each time that it occurs is independently an integer from 0 to 6;

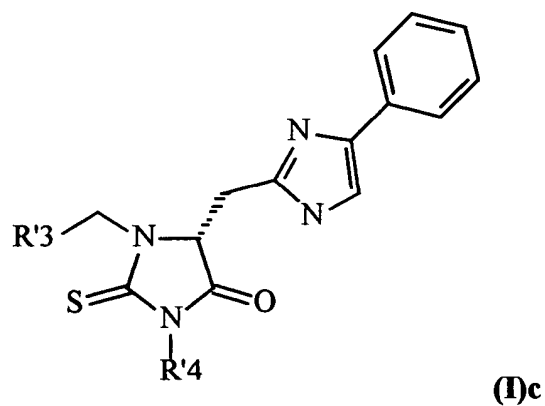
~~n is 0,~~ and

m is 1, 2 or 3.

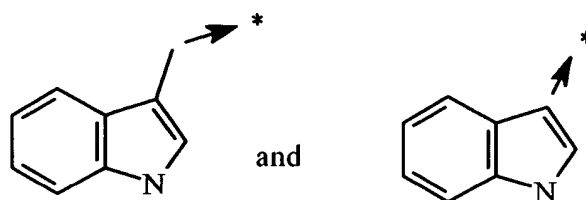
**Claim 19** (previously presented)      A compound of Claim 18 selected from the compounds of formulae



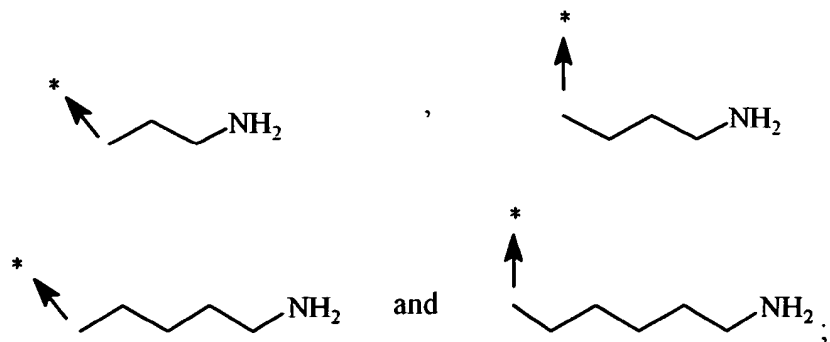
and



wherein R'3 is selected from

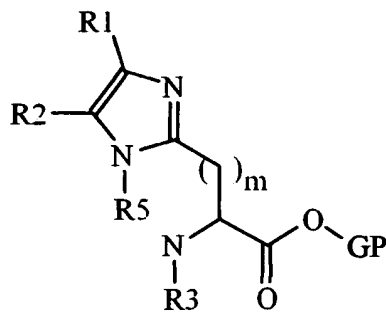


and R'3 is selected from



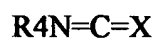
or a pharmaceutically acceptable salt of said compound.

**Claim 20 (currently amended)**      A process for the preparation of a  
compound of Claim 15 in which n is 0, comprising reacting a compound of the formula



(II)

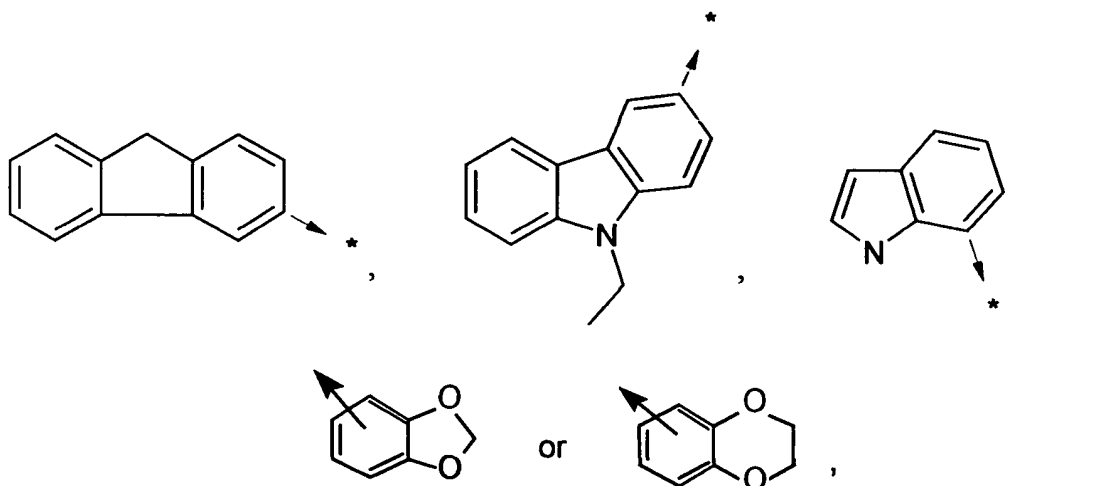
in which m, R1, R2, R3 and R5 have the same meaning as in Claim 15, and the O-GP radical is a parting protective group derived from an alcohol and with an isocyanate of the formula



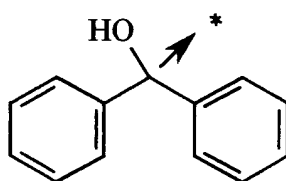
(III)

in which R4 and X have the same meaning as Claim 15, in the presence of a tertiary base for the duration of approximately 1 to 48 hours and at a temperature between 20 and 70°C.

**Claim 21** (previously presented)      A compound of Claim 15, wherein Z3 is selected from the group consisting of



unsubstituted or substituted non-aromatic heterocyclic, *bis*-arylalkyl, diarylalkyl and



or a pharmaceutically acceptable salt of said compound.

**Claim 22** (previously presented)      The process of Claim 20 wherein the protective parting group is an alcohol derived from the group consisting of benzyl alcohol, methanol and tert-butanol.

**Claims 23, 24 and 25** (cancelled).